1 Identification

- **Product identifier**
  - **Trade name:** IPS e.max ZirCAD MT Colouring Liquid violet / IPS e.max ZirCAD LT Colouring Liquid violet

- **Application of the substance / the mixture:** Manufacture of dental prosthesis

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Ivoclar Vivadent Inc.
    175 Pineview Drive, Amherst, N.Y. 14228
    USA
    Tel. +1 800 533 6825
    Fax +1 716 691 2285

  - Ivoclar Vivadent Inc.
    1-6600 Dixie Road
    Mississauga, Ontario
    L5T 2Y2
    Canada
    Phone: +1 905 670 8499
    Fax: +1 905 670 3102

- **Information department:** Quality Assurance / Regulatory Affairs

- **Emergency telephone number:**
  - 24 Hour Emergency Assistance:
    Emergency-Call USA - Infotrac: 1-800-535-5053
    Emergency-Call Canada - Canutec: 1-613-996-6666

  - General SDS Assistance:
    US: 1-800-533-6825
    Canada: 1-800-263-8182

2 Hazard identification

- **Classification of the substance or mixture**
  - Respiratory Sensitizer - Category 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  - Skin Sensitizer - Category 1 H317 May cause an allergic skin reaction.
  - Carcinogenicity - Category 1B H350 May cause cancer.
  - Reproductive Toxicity - Category 1 H360 May damage fertility or the unborn child.

- **Label elements**
  - **GHS label elements**
    The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**

  GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  - cobalt dinitrate

(Contd. on page 2)
Safety Data Sheet
according to HPR, Schedule 1

Printing date 06/20/2017
Reviewed on 06/13/2017
Version number 2

Trade name: IPS e.max ZirCAD MT Colouring Liquid violet / IPS e.max ZirCAD LT Colouring Liquid violet

Hazard statements
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause cancer.
May damage fertility or the unborn child.

Precautionary statements
Obtain special instructions before use.
Avoid release to the environment.
IF exposed or concerned: Get medical advice/attention.
Collect spillage.
Store locked up.

Classification system:
NFPA ratings (scale 0 - 4)

Health = 0
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = *0
Fire = 0
Reactivity = 0

3 Composition/Information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:
CAS: 10141-05-6 cobalt dinitrate 0.3-<1% w/w

4 First aid measures

- Description of first aid measures
- After inhalation:
  Supply fresh air or oxygen; call for doctor.
  In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:
  Rinse out mouth and then drink plenty of water.
  Seek medical treatment.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed
    No further relevant information available.

5 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.

(Contd. of page 1)
6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  Wear protective equipment. Keep unprotected persons away.
  Use respiratory protective device against the effects of fumes/dust/aerosol.
- **Environmental precautions**: Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up**:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Ensure adequate ventilation.
- **Reference to other sections**
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

- **Handling**:
  - **Precautions for safe handling**
    Only adequately trained personnel should handle this product.
    For use in dentistry only.
    Ensure good ventilation/exhaustion at the workplace.
    Open and handle receptacle with care.
    Prevent formation of aerosols.
  - **Information about protection against explosions and fires**: Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
  - **Storage**:
    - Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
    - Information about storage in one common storage facility: Not required.
  - **Further information about storage conditions**:
    Keep receptacle tightly sealed.
    Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/ Personal protection

- **Additional information about design of technical systems**: No further data; see item 7.
- **Control parameters**
  - **Components with limit values that require monitoring at the workplace**:
    - **CAS**: 10141-05-6 cobalt dinitrate
      - **EL Long-term value**: 0.02 mg/m³ as Co, IARC 2B
  - **Additional information**: The lists that were valid during the creation were used as basis.
Exposure controls

Personal protective equipment:

General protective and hygienic measures:
Usual hygienic measures for dental practice and dental laboratories.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Immediately remove all soiled and contaminated clothing.
Do not inhale gases / fumes / aerosols.
Store protective clothing separately.

Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. After use of gloves apply skin-cleaning agents and skin cosmetics.

Material of gloves
Natural rubber, NR
Chloroprene rubber, CR
Nitrile rubber, NBR
Butyl rubber, BR
Fluorocarbon rubber (Viton)
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tightly sealed goggles

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:
Form: Fluid
Color: Violet
Odor: Characteristic
Odor threshold: Not determined.

pH-value at 20 °C: 2.3

Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.
10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**: Stable under normal handling and storage conditions.
- **Thermal decomposition / conditions to be avoided**: No decomposition if used according to specifications.
- **Possibility of hazardous reactions**: No dangerous reactions known.
- **Conditions to avoid**: No further relevant information available.
- **Incompatible materials**: No further relevant information available.
- **Hazardous decomposition products**: None under normal conditions of storage and use.

11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity**
  - **Sensitization**: Sensitization possible through skin contact.
  - **Additional toxicological information**: Carcinogenic if inhaled.
- **Carcinogenic categories**
  - IARC (International Agency for Research on Cancer)
    - CAS: 10141-05-6 cobalt dinitrate 2B
  - NTP (National Toxicology Program)
    - None of the ingredients is listed.

12 Ecological information

- **Toxicity**
  - **Aquatic toxicity**: No further relevant information available.
  - **Persistence and degradability**: No further relevant information available.
13 Disposal considerations

- Waste treatment methods
- Recommendation:
  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
  Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.
- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - DOT, TDG, ADN, IMDG, IATA: Void
- UN proper shipping name
  - DOT, TDG, ADN, IMDG, IATA: Void
- Transport hazard class(es)
  - DOT, TDG, ADN, IMDG, IATA
  - Class: Void
- Packing group
  - DOT, TDG, IMDG, IATA: Void
- Environmental hazards:
  - Not applicable.
- Special precautions for user
  - Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.
- Transport/Additional information:
  - Product is not classified as a dangerous good for transport (ADR, IMDG, IATA).
- UN "Model Regulation":
  - Void
15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

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<th>Section</th>
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<td>Sara</td>
<td>None of the ingredients is listed.</td>
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<tr>
<td>Section 355 (extremely hazardous substances)</td>
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<tr>
<td>TSCA (Toxic Substances Control Act)</td>
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GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

Signal word: Danger

Hazard-determining components of labeling:
cobalt dinitrate

Hazard statements
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause cancer.
May damage fertility or the unborn child.

Precautionary statements
Obtain special instructions before use.
Avoid release to the environment.
IF exposed or concerned: Get medical advice/attention.
Collect spillage.
Store locked up.

National regulations:
Other regulations, limitations and prohibitive regulations
The product is a medical device according to the Directive 93/42/EEC.
This product is classified as a medical device under US and Canadian regulations and has been reviewed by the US Food and Drug Administration and Health Canada.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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<td>Date of preparation / last revision</td>
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<td>Abbreviations and acronyms:</td>
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Trade name: IPS e.max ZirCAD MT Colouring Liquid violet / IPS e.max ZirCAD LT Colouring Liquid violet

CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
* Data compared to the previous version altered.